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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,663	04/02/2004	Hideyuki Shimizu	450100-05007	3376

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EXAMINER	
AMIN, JWALANT B	
ART UNIT	**PAPER NUMBER**
2628	

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/817,663	SHIMIZU, HIDEYUKI	
	Examiner	Art Unit	
	Jwalant Amin	2676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) *11-15* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-6 and 8-10* is/are rejected.

7)☒ Claim(s) *2 and 7* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

2. This application contains claims directed to the following patentably distinct species:

I. Species of Fig. 3 and Fig. 16 that illustrate a picture obtained on applying a flipping effect and a tubular flipping effect respectively.

II. Species of Fig. 25 that illustrate a picture subjected to a folding effect.

3. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims are generic.

4. Should applicant traverse on ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

5. During a telephone conversation with Mr. William Frommer on March 8, 2006 a provisional election was made with traverse to prosecute the invention of species of Fig. 3 and Fig. 16, claims 1-10. Affirmation of this election must be made by applicant in

replying to this Office action. Claims 11-15 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

6. Claims 2 and 7 are objected to because of the following informalities: the lower case 'r' used in $f_1(r)$ and other equations is not defined in the claims. Appropriate correction is required.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 5 and 10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. An address signal generating program per se, not stored on a computer-readable medium is non-statutory subject matter. For prior art rejection, the examiner interprets an address signal generating program is stored on a computer-readable medium.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 3-6 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki et al. (US Patent No. 4,860,217; hereinafter referred to as Sasaki) in view of Ken Stone ("Perspective Filters in FCP", date: November 2001, http://www.lafcpug.org/tutorials/basic_perspective_print.html; hereinafter referred to as Stone).

3. Regarding claim 1, Sasaki teaches a special effect device (Fig. 5 and col. 13 lines 34-42; a system for transforming image signals which achieves the above-described series of transformation processing corresponds to a special effect device) in which picture signals are read out from a frame buffer based on an address signal (col. 13 lines 43-47; image data corresponds to picture signals; image memory corresponds to frame buffer) to impart a desired special effect to the picture signals read out from the frame buffer (col. 13 lines 45-47, col. 18 lines 32-35; page turn-over effect corresponds to special effect; carries out image transformation such that the input image can be transformed to the output image having the page turn-over effect corresponds to impart a desired special effect; input image data IND is ... read image data is in turn read out corresponds to picture signals read out from said frame buffer), the special effect device comprising address signal generating means for generating a readout address signal for the picture signals stored in the frame buffer (col. 13 lines 43-47; image memory corresponds to frame buffer; read image data corresponds to picture signals stored in frame buffer). Sasaki also teaches "page turn-over effect" (Fig. 3, col. 1 lines 63-68, col. 2 lines 1-4; page of a book were turned over corresponds to obtaining a folded figure).

Sasaki discloses all of the claimed limitations as stated above, except that the special effect device flips a picture ruptured with an optional position of a picture, corresponding to said picture signals stored in said frame buffer, as a rupture point, for extending along a curve formed by an arc of a circle of a radius of an optional size, defined on a second virtual plane perpendicular to a first virtual plane to which belongs said picture, and by moving, after said picture corresponding to said rupture point has reached a height of the diameter of a circle on said second virtual plane, said picture corresponding to said rupture point along a parallel plane to said first virtual plane, such a special effect will be obtained in which the picture on said first virtual plane is peeled off sequentially radially along said arc about said optional position as center so as to disappear to outside of a display area. The examiner takes an official notice of the fact that when a picture is ruptured, it would create a hole and generate a folded figure with many curls around the periphery of the hole. However, Stone teaches to generate the peel effect by flipping the original image or the back image (Pages 2-3; image below the backside of the curl is mapped with the same image as on the front corresponds to flipping a picture; starting point of the curl corresponds to rupture point; the curve of the curl corresponds to the curve formed by an arc of a circle of a radius of an optional size; the image lies on the first virtual plane; part of the curled image perpendicular to the image lies on a second virtual plane which is perpendicular to the first virtual plane; the other part of the curl that is parallel to the image lies in the plane parallel to the first virtual plane; checking this box will keep the curl from wrapping around itself and will simply peel the image corresponds to picture moves along the plane parallel to the first

virtual plane; if the amount is 100, the curl progresses to the end of the image which corresponds to the image disappears from the display area; how far the curl will progress corresponds to moving; figures with peel effect and peel effect with image on back as shown on page 3 shows the special effect obtained by peeling off sequentially radially along the arc, and at the same time showing the flipped original image or the back image respectively). Therefore, it would have been obvious to one of ordinary skill in the art at the time of present invention to use the curl filter and page-peel transition effect as taught by Stone and apply it into the "page turn-over effect" method of Sasaki to create special effects because adding such additional filters will give the user the opportunity to be truly creative and generate a nice special effect (page 6).

4. Regarding claims 3 and 4, in addition to the rejection provided in claim 1, Sasaki also teaches an address signal generating device and an address signal generating method (Fig. 5, col. 4 lines 7-8, col. 13 lines 40-42; system corresponds to device; a method for effecting a transformation of a video image corresponds to a method for generating an address signal; a system for transforming image signals corresponds to address signal generating device).

5. Regarding claim 5, the statements presented above for claim 3 are incorporated herein.

Sasaki teaches all of the claimed limitations as stated above, except that the address signal generating process is executed by an address signal generating program. Sasaki teaches to execute the process using a dedicated hardware system. However, Stone teaches to use software to perform special effects (pg. 1-6; FCP stands

for Apple's Final Cut Pro which is a software program). Therefore, it would have been obvious to one of ordinary skill in art at the time of present invention to use a computer software program as taught by Stone to create special effects as taught by Shiraishi because a software program is portable and thus it could be used to create special effects in a computer system without a dedicated hardware.

6. Regarding claim 6, Sasaki teaches a special effect device (Fig. 5 and col. 13 lines 34-42; a system for transforming image signals which achieves the above-described series of transformation processing corresponds to a special effect device) in which picture signals are read out from a frame buffer based on an address signal (col. 13 lines 43-47; image data corresponds to picture signals; image memory corresponds to frame buffer) to impart a desired special effect to the picture signals read out from the frame buffer (col. 13 lines 45-47, col. 18 lines 32-35; page turn-over effect corresponds to special effect; carries out image transformation such that the input image can be transformed to the output image having the page turn-over effect corresponds to impart a desired special effect; input image data IND is ... read image data is in turn read out corresponds to picture signals read out from said frame buffer), the special effect device comprising address signal generating means for generating a readout address signal for the picture signals stored in the frame buffer (col. 13 lines 43-47; image memory corresponds to frame buffer; read image data corresponds to picture signals stored in frame buffer). Sasaki also teaches "page turn-over effect" (Fig. 3, col. 1 lines 63-68, col. 2 lines 1-4; page of a book were turned over corresponds to obtaining a folded figure).

Sasaki discloses all of the claimed limitations as stated above, except that the special effect device flips a picture ruptured with an optional position of a picture, corresponding to said picture signals stored in said frame buffer, as a rupture point, for extending along a curve formed by an arc of a circle of a radius of an optional size, defined on a second virtual plane perpendicular to a first virtual plane to which belongs said picture, and by moving, after said picture corresponding to said rupture point has reached a height of the diameter of a circle on said second virtual plane, said picture corresponding to said rupture point as if said picture corresponding to said rupture point is rolled along the other arc, such a special effect will be obtained in which the picture on said first virtual plane is peeled off sequentially radially along said arc, about said optional position as center, so as to disappear to outside of a display area. The examiner takes an official notice of the fact that when a picture is ruptured, it would create a hole and generate a folded figure with many curls around the periphery of the hole. However, Stone teaches to generate the peel effect by flipping the original image or the back image such that the curl of the image will wrap around itself (Pages 2-3; image below the backside of the curl is mapped with the same image as on the front corresponds to flipping a picture; starting point of the curl corresponds to rupture point; the curve of the curl corresponds to the curve formed by an arc of a circle of a radius of an optional size; the image lies on the first virtual plane; part of the curled image perpendicular to the image lies on a second virtual plane which is perpendicular to the first virtual plane; the other part of the curl that is parallel to the image lies in the plane parallel to the first virtual plane; checking this box will keep the curl from wrapping

around itself and will simply peel the image corresponds to picture moves along the plane parallel to the first virtual plane; wrapping the curl means to complete the circle by rolling to the other arc of the circle, and so curl wrapping around itself corresponds to picture is rolled along the other arc of the circle; if the amount is 100, the curl progresses to the end of the image which corresponds to the image disappears from the display area; how far the curl will progress corresponds to moving; figures with peel effect and peel effect with image on back as shown on page 3 shows the special effect obtained by peeling off sequentially radially along the arc, and at the same time showing the flipped original image or the back image respectively). Therefore, it would have been obvious to one of ordinary skill in the art at the time of present invention to use the curl filter and page-peel transition effect as taught by Stone and apply it into the "page turn-over effect" method of Sasaki to create special effects because adding such additional filters will give the user the opportunity to be truly creative and generate a nice special effect (page 6).

7. Regarding claim 8, the statements presented above with respect to claim 6 and claim 3 are incorporated herein.

8. Regarding claim 9, the statements presented above with respect to claim 6 and claim 4 are incorporated herein.

9. Regarding claim 10, the statements presented above with respect to claim 6 and claim 5 are incorporated herein.

Allowable Subject Matter

10. Claims 2 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter:

- Regarding claim 2, the prior art fails to show the equations as taught by the claim.
- Regarding claim 7, the prior art fails to show the equations as taught by the claim.

References Cited

12. The following references teach a bullet forms a hole in a metal sheet or a paper and a folded figure is obtained due to the rupturing of paper or metal sheet.

- http://www.dreamstime.com/bazooka-holeinasteelwall-image458612
- http://www.amazon.com/gp/product/B0002NIIQ8/qid=1141404658/sr=1-13/ref=sr_1_13/002-8108102-7496006?%5Fencoding=UTF8&v=glance&n=15684181
- http://photos.travisswicegood.com/v/Objects-and-Toys/StopSignBulletHole.jpg.html

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jwalant Amin whose telephone number is 571-272-

2455. The examiner can normally be reached on Monday - Friday 9:30 a.m. - 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman can be reached on 571-272-7653. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*** J.A.
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